I am deeply concerned about the proposed legislation of S.B. 78. It is my understanding that this bill would essentially remove biodiversity as a criterion by which the DNR manages land in Michigan. As a Fisheries and Wildlife student at Michigan State University and employee of the Environmental Section at MDOT, I was shocked and appalled to hear of this. In fact, I thought there was no way it could be true. I can only assume this legislation has been introduced in pursuit of the personal agendas of a select few, while it threatens the interests of the greater population. Michigan is a state blessed with a mosaic of beautiful natural ecosystems as well as a population of millions of people who enjoy them. As one of these citizens, I feel it is my right and duty to speak out against legislation that would make it virtually impossible to conserve these lands for current and future generations.

As students, one of the primary and most fundamental things we were taught, at the very beginning of our curriculum was the importance of biodiversity. In fact, this principle was taught to us even earlier in life, in elementary, middle, and high school science classes. The state of Michigan's official website even has a page devoted to the MEECS, or Michigan Environmental Education Curriculum Support. This is a program approved for children grades 5 to 6. It contains lessons such as biodiversity and its importance, factors threatening biodiversity, stewardship, and the role of the government. It has clearly been established that biodiversity NEEDS to be considered in our state, even by our children.

I know I do not speak just for Natural Resources academics or biologists when I say this bill is not only ill-advised, but dangerous and corrosive to our great state. I find every part of the bill highly disturbing but the statement, "Delete a legislative finding that most losses of biological diversity are the result of human activity" is possibly the most shocking. The DNR, by law, must operate on "sound scientific" principles. The aforementioned statement is a blatant denial of modern science. As stated in a 2000 article entitled "Consequences of Changing Biodiversity" published in the scientific journal Nature: "Human alteration of the global environment has triggered the sixth major extinction event in the history of life and caused widespread changes in the global distribution of organisms." The article goes on to warn, "Changes in diversity can directly reduce sources of food, fuel, structural materials, medicinals or genetic resources. These changes can also alter the abundance of other species that control ecosystem processes, leading to further changes in community composition and vulnerability to invasion." These concepts are not unique to this paper. A quick search of books and scholarly articles in the fields of ecology, natural resource management, or environmental science yields similar findings across hundreds of sources. An excerpt from the acclaimed book by E.O. Wilson appropriately titled Biodiversity reads "People everywhere should understand the importance of the loss of diversity not only in tropical forests, coastal zones, and other climatically defined regions of the world but also in demographically delineated regions such as areas of urbanization." (pg 26). Wilson

also notes "Politicians and social scientists who have questioned the extent of current extinctions are simply displaying their deep ignorance of ecology" (pg 23). We cannot allow the DNR to make decisions ignorant of ecology. It is an accepted scientific fact that loss of biodiversity is not only human-driven but has great consequences for humans as well. We have already seen one of these ill-effects in action with the invasion of certain exotic species such as Purple Loosestrife, Common Reed, and Emerald Ash Borer. These species have already destroyed many natural communities in Michigan, replacing them with monocultures or barren wastelands and jeopardizing ecosystem functions and services.

The article mentioned above does not even touch on the issue of tourism. A 2010 study done by the Michigan State University Center for Community and Economic Development found that "ecotourism" has become the most rapidly growing sector of the tourism market and that it has significant potential in Michigan. Visits to Pictured Rocks National Lakeshore alone accounted for half of the region's tourism spending in 2001. Thousands of people come to Michigan for its diverse species and unique ecosystems. Taking away provisions for biodiversity is certain to reduce the allure of Michigan as a destination for such tourists.

Michigan State professor of Ecology, Orlando Sarnelle, has spoken out against the bill, calling it pure "anti-science". In his words, "We simply cannot legislate the findings of science about the effects of human activities on biodiversity any more than we can legislate that the sun revolves around the earth." He also notes that if passed, the bill will greatly limit the ability of Michigan to attract scientists and engineers, as no sound-minded scientist wants to work in or for a government that has blatantly ignored science.

We understand that the DNR derives most of its money from hunting and fishing licenses, so many supporting this bill want to see 100% of their funds go to management of game species as opposed to biodiversity. However, these game species are not isolated populations; they are parts of a greater community of species in an ecosystem. Without provisions to protect these ecosystems as a whole, game species will suffer as well. Professor Emeritus Burt Barnes with the University of Michigan School of Natural Resources and Environment has also spoken out against this bill, saying "All individuals and organizations that focus on natural resources necessarily must consider the organisms occupying the lands for which they are responsible. Therefore, it is impossible to legislate biodiversity or its restoration out of the mission of any organization trying to address and solve human-caused problems of the world."

To compromise the protection of biodiversity is to compromise one of our state's greatest assets. The DNR already has limited power to protect the diverse and unique ecosystems found in this state. To allow the pursuit of money or personal property to stamp out this small amount of power is extremely shortsighted, as it will certainly result in greater long-term consequences for everyone in this state. Please consider the interests and livelihoods of the millions of people who live in

and love Michigan over your personal interests, before supporting such a destructive bill. Thank you.

Drafted by:

Shannon Carvey and Alyssa Wethington

Fisheries & Wildlife Department Seniors

Michigan State University

Supported by:

Dr. Orlando Sarnelle Andrew Crosby, M.S. Kaitlyn Wilson Dawn Lucas **Alex Barnes** Alex Fung **Ashley Adams** Kaitlin Clark Ian Lacy Gina Sellinger Evan Farinosi **Brandon Palmer** Kirsten Johnson Glenn Brado Ryan Oleynik Luke Baker **David Rogers** Aaron Belulz Alex Dutcher Katelyn Wagner Joey Riedy Dana Castle **Cody Porter** Corey Blake Laura Kniffen Darrin McCullough Ellen Perro

Chelsea Faulkner Carly DeVries Seth Lucks

Drew Vandergrift Dylan Tauzer

Emma Jakobcic Angelia Lane **Tracy Swem** Nick Console Sarah Marhofer **Ashley Hutchinson** Ashlev Baird Sam Blanken Sarah Kilvington **Kelly Donohue Brooke Merrill Rvan MacWilliams** Alex Prediger Damen Kurzer Matthew Maksimoski Anna Reh-Gingerich Suse LaGory **Elle Gulotty** Matt Bach Megan Long Nicholas Kipa Laurie Wethington Robert Wethington **Bruce Porter** Dan Myers Jeremy Lowell Adrienne Adamczyk